

## Goal 1 Review

### EXPONENTS

Simplify each expression.

1.  $h^2k^{-5}d^3k^2$

2.  $\frac{r^3t^{-7}}{t^5}$

3.  $2y^{-9}h^2(2y^9h^{-4})^{-6}$

4. If  $k = 3$ , which expression had the least value?

A.  $k^2k^0$

B.  $k^k$

C.  $k^8k^{-5}$

D.  $-k^k k^{-4}$

### POLYNOMIALS

Simplify.

5.  $(4x^2 + 2x + 5) + (7x^2 - 5x + 2)$

6.  $(9a^2 - 4 - 5a) - (12a - 6a^2 + 3)$

7.  $-t(5t^2 + t)$

8.  $(x + 4)(x - 3)$

9.  $2w(w^5 - 4w)$

10.  $(r + 6)^2$

11.  $(p + 2)(2p^2 - 5p + 4)$

### PROBLEM SOLVING/FORMULAS

12. Jon is in charge of ordering eggs to make pancake batter for his school's all-you-can-eat pancake breakfast fund-raiser. Jon figures that 594 eggs will be needed to make enough pancakes for the number of tickets sold. How many cartons of eggs should Jon order if each carton contains 1 dozen eggs?

13. Use the formula  $P = 2l + 2w$  to find the width of a rectangle with a perimeter of 26in. and a length of 6in.

### DIRECT VARIATION

See reverse side for practice